following amendments and remarks.

IN THE SPECIFICATION

Please amend the specification pursuant to 37 C.F.R. §1.121 as follows (see the accompanying "marked-up" version pursuant to 1.121):

Replace the first paragraph immediately after the title, with the following paragraph:

C1

This is a continuation of Application Serial No. 08/838,079, filed April 15, 1997, now abandoned, which claims priority from provisional application No. 60/016,619, filed May 1, 1996 under 35 U.S.C. 119. Each of these prior applications is hereby incorporated herein by reference, in its entirety.

[Replace the three paragraphs that begin with the first full paragraph on page 5] (which beings with "It has previously") and end with the first full paragraph on page 6 (which begins with "Further illustration") with the following three paragraphs:

C2

It has previously been shown that prolactin, or substances that affect circulating prolactin levels, also affect circadian rhythms and in fact can be used to modify such rhythms (so that they more closely resemble the rhythms of lean, healthy, young individuals of the same sex) and to reset such rhythms (so that the modified rhythms persist in the modified condition). See, e.g. U.S. Patent Nos. 5,468,755; 5,585,347; 5,344,832; 5,496,803; 5,716,932; 5,716,993; 5,731,287; 5,679,685 and 5,344,832. This prior work by the present inventors has been clinically tested in humans afflicted with various physiological disorders (obesity, diabetes, atherosclerosis, hypertension, immune dysfunction, and others) with meaningful results.

In particular, in U.S. Patent No. 5,585,347 and in its continuation-in-part U.S. Pat.

No. 5,830,895, the present inventors disclose a method for the reduction in a subject, vertebrate animal or human, of body fat stores, and reduction of at least one of insulin resistance, hyperinsulinemia, and hyperglycemia, and other metabolic diseases, especially those associated with Type II diabetes. More specifically, the foregoing applications disclose methods for: (i) assessing the daily prolactin level cycles of a normal (healthy) human or vertebrate animal (free of obesity, disease or other disorder); (ii) diagnosing aberrant daily prolactin level cycles of a human or vertebrate animal; and (iii) determining the appropriate adjustments that need to be made to normalize such aberrant prolactin level cycles. This method involves the administration of at least one of a prolactin reducer and/or a prolactin enhancer at a first predetermined time (or times) within a 24-hour period (if only a prolactin reducer is administered) and/or at a second predetermined time (or times) of a 24-hour period (if a prolactin enhancer is administered). This therapy, when continued for several days, weeks or months, results in the long-term adjustment of aberrant or abnormal prolactin level cycles so that they conform to (or approach) normal prolactin level cycles. In most cases, this benefit persists over the long-term even after cessation of therapy. As a result, aberrant physiological parameters associated with various metabolic disorders are restored to normal levels or are modified to approach normal levels.

Further illustration of the utility of resetting prolactin rhythms can be found in U.S. Patent No. 5,696,128, a method for regulating immune function by resetting prolactin rhythms is disclosed, and in U.S. Patent No. 5,797,748, a method for arresting the growth of or eradicating neoplastic growths in mammals having daily prolactin rhythms is disclosed.

IN THE CLAIMS

Please cancel claims 48 and 55-58, without prejudice.

Please amend the claims pursuant to 37 C.F.R. §1.121 as follows (see the accompanying "marked-up" version pursuant to 1.121):

34. (Amended) A method for arresting the growth of or eradicating tumors in a mammal bearing one or more tumors comprising the steps of:

(a) comparing the daily plasma prolactin profile of said tumor bearing mammal to a normal daily prolactin profile for healthy mammals of the same species and sex;

(b) adjusting the daily plasma prolactin profile of said tumor bearing mammal by administering a prolactin enhancer or prolactin inhibitor at appropriate time intervals of day such that the adjusted daily plasma prolactin profile of said tumor bearing mammal conforms to or approaches the normal daily plasma prolactin profile for healthy members of the same species and sex of said mammal;

(c) contacting the cells of said tumor with a benzophenoxazine-analog photosensitizer having phototoxicity against tumor cells; and

(d) exposing said contacted tumor cells to light, such that the growth of said tumor is retarded or said tumor is eradicated.

38. (Amended) The method of claim 37 wherein said melatonin or a pharmaceutically acceptable salt thereof is administered in an amount within the range of about 0.5 to about 20 mg/person/day.

54. (Amended) The method of claim 43 wherein said benzophenoxazine analog is a member selected from the group consisting of 5-ethylamino-9-diethylamino-2-iodobenzo[a]phenothiaziniumchloride and 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride.